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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,350	04/15/2004	Michael L. Fripp	2003-IP-009957 U2 USA	8640
49431	7590	03/10/2006	EXAMINER	
KONNEKER & SMITH, P.C. 660 NORTH CENTRAL EXPRESSWAY SUITE 230 PLANO, TX 75074			WAKS, JOSEPH	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/825,350

Applicant(s)

FRIPP ET AL.

Examiner

Joseph Waks

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*pm*

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 37-87 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-15, 37-59, 65-68 and 84-86 is/are allowed.
- 6) ☐ Claim(s) 60-64, 69-83 and 87 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the features of the generator including an electromagnetically active material, wherein strain being produced in the electromagnetically active material in response to displacement of the vibrating assembly, and the generator further including a magnet and coil, and wherein relative displacement between the magnet and coil produces electricity in the coil in response to displacement of the vibrating assembly as recited in claims 74 and 79, or a housing which is displaced in response to displacement of the vibrating assembly, wherein the housing contains a magnet and a coil, and wherein relative displacement between the magnet and coil produces electricity in the coil in response to displacement of the housing as recited in claim 80, or first and second magnets, and a coil, wherein relative displacement between the first magnet and the coil is produced in response to displacement of the vibrating assembly, and wherein magnetic fields produced by the first and second magnets bias against relative displacement between the first and second magnets as recited in claim 81, or a magnet and coil, and wherein relative rotation between the magnet and coil is produced in response to displacement of the vibrating assembly as recited in claim 82, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

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replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 74-82 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The features of the generator including an electromagnetically active material, wherein strain being produced in the electromagnetically active material in

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response to displacement of the vibrating assembly, and the generator further including a magnet and coil, and wherein relative displacement between the magnet and coil produces electricity in the coil in response to displacement of the vibrating assembly as recited in claims 74 and 79, or a housing which is displaced in response to displacement of the vibrating assembly, wherein the housing contains a magnet and a coil, and wherein relative displacement between the magnet and coil produces electricity in the coil in response to displacement of the housing as recited in claim 80, or first and second magnets, and a coil, wherein relative displacement between the first magnet and the coil is produced in response to displacement of the vibrating assembly, and wherein magnetic fields produced by the first and second magnets bias against relative displacement between the first and second magnets as recited in claim 81, or a magnet and coil, and wherein relative rotation between the magnet and coil is produced in response to displacement of the vibrating assembly as recited in claim 82, are not supported neither by the specification nor the drawings and seems to contradict one each other.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 60, 62-64, 74, 79 are rejected under 35 U.S.C. 102(b) as being anticipated by Tubel et al. (US 5,839,508).

Tubel et al. disclose in Figure 3 invention as claimed: a vibrating assembly 72 which displaces in response to fluid flow across the vibrating assembly, and a generator 78 which generates electrical power in response to displacement of the vibrating assembly, wherein the vibrating assembly includes a lift reversal device which produces alternating lift coefficients in the vibrating assembly in response to the fluid flow across the vibrating assembly, magnet and coil, and wherein relative displacement between the magnet 72 and coil 78 produces electricity in the coil in response to displacement of the vibrating assembly.

Re claim 74, Tubel et al. disclose in Figure 4A the generator which generates electrical power in response to displacement of the vibrating assembly 82, wherein the generator includes a magnet 84 and coil 86, 88, and wherein relative displacement between the magnet and produces electricity in the coil in response to displacement of the vibrating assembly.

6. Claims 69, 72, and 73 are rejected under 35 U.S.C. 102(b) as being anticipated by Russel et al. (US 3,970,877).

Russel et al. disclose invention as claimed: a vibrating assembly 11 which displaces in response to fluid flow across the vibrating assembly in a wellbore, and a generator 10 which generates electrical power in response to displacement of the vibrating assembly, wherein the generator includes a piezoelectric material.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 83 is rejected under 35 U.S.C. 103(a) as being unpatentable over Russel et al. (US 3,970,877) in view of Kolm et al. (US 4,387,318).

Russel et al. disclose the system essentially as claimed. However, Russel et al. do not disclose the vibrating assembly includes a lift reversal device, which produces alternating lift coefficients in the vibrating assembly in response to the fluid flow across the vibrating assembly.

Kolm et al. disclose a vibrating assembly 16 which displaces in response to fluid flow across the vibrating assembly, and a generator 12 which generates electrical power in response to displacement of the vibrating assembly, wherein the vibrating assembly includes a lift reversal device which produces alternating lift coefficients in the vibrating assembly in response to the fluid flow across the vibrating assembly.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to the system as taught by Russel et al. and to provide the vibrating assembly includes a lift reversal device as taught by B for the purpose of assuring sufficient deformation of the piezoelectric material generating electric power.

9. Claim 70, 71, 73 and 87 is rejected under 35 U.S.C. 103(a) as being unpatentable over Russel et al. (US 3,970,877).

Russel et al. disclose the claimed invention except for Describe difference and press the electromagnetically active material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the piezoelectric

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material with the well known in the art electromagnetically active material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

*In re Leshin*, 125 USPQ 416. Moreover, since applicant has not disclosed that electromagnetically active material solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the piezoelectric material.

Re claim 70, the coil producing electricity in response to strain produced in the electromagnetically active material is inherent to electric generators using such materials.

#### ***Double Patenting***

10. Claim 79 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 74. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

#### ***Allowable Subject Matter***

11. Claims 1-15, 37-59, 65-68, and 84-86 are allowed.

#### ***Response to Arguments***

12. The indicated allowability of claims 70, 71, 73-82 is withdrawn. See rejections above.



13. Applicant's arguments filed January 30, 2006 have been fully considered but they are not persuasive.

Examiner respectfully traverses applicants' argument regarding the Tubel reference describing the propeller-shaped magnet 72 as rotating in lieu of the claim recited vibrating motion. Examiner directs applicant's attention to column 8, line 37 where Tubel indicates that the magnet reed 72 rotates or oscillates as a result of medium flow in the channel. The 1984 issue of Webster's II New Riverside University Dictionary defines "oscillate" as to swing on and back. The dictionary also defines term "vibrate" as to move back and forth. Therefore the magnet 72 reads on the claim language and the rejection is appropriate.

14. Applicant's arguments with respect to claims 7, 9, 11-13, 34, 35, 61, 70, 71 and 73-82 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Waks whose telephone number is (571) 272-2037. The examiner can normally be reached on Monday through Thursday 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren E. Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joseph Waks  
Primary Examiner  
Art Unit 2834

3/8/06